

10. The process according to claim 1, wherein the rice substrate is slurried and has a dry solid content of between 10 to 55%.

11. The process according to claim 1, wherein the temperature is between 70°
5 and 55°C.

12. The process according to claim 1 further comprising the step of c)
enzymatically hydrolyzing the rice protein concentrate obtained in step b) with an enzyme
having GSH activity and a starch hydrolyzing enzyme at a pH of about 3.0 to 6.5 and at a
10 temperature range of 70° to 55°C to obtain a fraction including solubilized starch and
insoluble rice protein and d) separating the fractions to obtain a high-purity rice protein
concentrate.

13. The process according to claim 12 further comprising drying the high-purity
15 rice protein concentrate obtained in step d).

14. The process according to claim 12, wherein the starch hydrolyzing enzyme
of step c) is an alpha amylase.

20 15. The process according to claim 12, wherein the protein content of the high-
purity rice protein concentrate is at least about 60%.

25 16. The rice protein concentrate obtained according to the process of claim 1 or
claim 12.

17. An animal feed formulation comprising the rice protein concentrate obtained
according to the process of claim 1 or claim 12.

30 18. A human food formulation comprising the rice protein concentrate obtained
according to the process of claim 1 or claim 12.

35 19. A method of increasing the protein content of an animal feed comprising a)
contacting a rice substrate with a combination of enzymes which include a starch
hydrolyzing enzyme and a granular starch hydrolyzing (GSH) enzyme at a temperature
below 72°C for a sufficient period of time to hydrolyze 60% of the starch in the rice
substrate, b) obtaining a solubilized starch fraction and a residue, said residue including

insoluble protein, c) separating the residue to obtain a rice protein concentrate and d) adding the rice protein concentrate to an animal feed.

20. The method according to claim 19, wherein the starch hydrolyzing enzyme
5 is an alpha amylase.

21. The method according to claim 19 further comprising the steps of contacting
the residue obtained in step d) with a GSH enzyme and optionally a starch hydrolyzing
enzyme to obtain a fraction including solubilized starch and a residue comprising insoluble
10 rice protein, separating the residue to obtain a high-purity rice protein concentrate, and
adding the high-purity rice protein concentrate to an animal feed.

22. An animal feed comprising the high-purity rice protein concentrate obtained
according to claim 21.